

IN THE CLAIMS:

1. (Currently Amended) A syringe comprising:
a body; and
a plunger movably disposed within the body, the plunger comprising a wall having an inner surface and an outer surface and one or more inwardly projecting flanges fixedly disposed on the inner surface of the wall.
2. (Original) The syringe of Claim 1 wherein the one or more inwardly projecting flanges comprises a plurality of flanges.
3. (Currently Amended) The syringe of Claim 2 wherein the plurality of flanges are spaced along a portion of the inner ~~interior~~ surface of the wall.
4. (Currently Amended) The syringe of Claim 3 wherein the plurality of flanges are evenly spaced along the inner ~~interior~~ surface of the wall.
5. (Currently Amended) The syringe of Claim 1 wherein the inner ~~interior~~ surface of the wall defines a retaining shoulder formed along a length thereof.
6. (Original) The syringe of Claim 5 wherein the retaining shoulder is formed along an axial length of the wall.
7. (Original) The syringe of Claim 1 wherein the body and the plunger wall are substantially cylindrical and the one or more inwardly projecting flanges comprises a plurality of flanges.

8. (Currently Amended) The syringe of Claim 7 wherein the plurality of inwardlyprojecting flanges extend longitudinally along a portion of the inner interior surface of the plunger wall.

9. (Currently Amended) The syringe of Claim 7 wherein the plurality of inwardly projecting flanges are radially spaced along a portion of the inner interior surface of the wall.

10. (Currently Amended) The syringe of Claim 7 wherein the inner interior surface of the wall defines a retaining shoulder formed along a circumference thereof.

11. (Currently Amended) The syringe of Claim 7 wherein the inner interior surface of the wall defines a retaining shoulder formed along an axial plane thereof, and the plurality of inwardly projecting flanges are radially spaced along the inner interior surface of the wall and extend in a longitudinal direction proximal to the retaining shoulder.

12. (Original) The syringe of Claim 11 wherein the plurality of flanges are evenly spaced along the wall.

13. (Currently Amended) A fluid injection system comprising:
an injector comprising:

a housing; and

a drive member at least partially disposed within the housing, the drive member comprising at least one retaining member and one or more outwardly extending flange members; and

a syringe comprising:

a body; and

a plunger movably disposed within the body, the plunger comprising a wall having an inner surface defining a retaining shoulder and one or more inwardly projecting flanges ~~fixedly~~ disposed on the inner surface of the wall;
wherein the at least one retaining member on the drive member of the injector is adapted to engage the retaining shoulder on the plunger wall to enable the drive member to retract the plunger with the body of the syringe;
wherein the one or more inwardly projecting flanges on the plunger wall are adapted to engage the one or more outwardly extending flange members on the drive member when the syringe body is rotated about its longitudinal axis, the one or more outwardly extending flange members operable to cause the at least one retaining member on the drive member to disengage the retaining shoulder on the plunger wall upon rotation of the syringe body.

14. (Original) The fluid injection system of Claim 13 wherein the one or more inwardly projecting flanges comprises a plurality of flanges.

15. (Currently Amended) The fluid injection system of Claim 14 wherein the plurality of flanges are spaced along a portion of the ~~inner~~ interior surface of the wall.

16. (Currently Amended) The fluid injection system of Claim 15 wherein the plurality of flanges are evenly spaced along the ~~inner~~ interior surface of the wall.

17. (Original) The fluid injection system of Claim 13 wherein the retaining shoulder is formed along an axial length of the wall.

18. (Original) The fluid injection system of Claim 13 wherein the body and the plunger wall are substantially cylindrical and the one or more inwardly projecting flanges comprises a plurality of flanges.

19. (New) A syringe comprising:

a body; and

a plunger movably disposed within the body, the plunger comprising a base member having an inner surface and an outer surface and one or more inwardly abutting connection members disposed on the inner surface of the base member;

wherein the inwardly abutting connection members extend from and terminate within the base member.

20. (New) The syringe of Claim 19, wherein the one or more inwardly abutting connection members are supported by the inner surface of the base member and extend in a radial position.

21. (New) A fluid injection system comprising:

an injector comprising:

a housing; and

a drive member at least partially disposed within the housing, the drive member comprising at least one retaining member and one or more outwardly extending flange members; and

a syringe comprising:

a body; and

a plunger movably disposed within the body, the plunger comprising a base member having an inner surface defining a retaining shoulder and one or more inwardly projecting flanges disposed within the inner surface of the base member;

wherein the at least one retaining member on the drive member of the injector is adapted to engage the retaining shoulder on the plunger wall to enable the drive member to retract the plunger with the body of the syringe;

wherein the one or more inwardly projecting flanges on the inner surface are adapted to engage at a position within the base member the one or more outwardly

extending flange members on the drive member when the syringe body is rotated about its longitudinal axis, the one or more outwardly extending flange members operable to cause the at least one retaining member on the drive member to disengage the retaining shoulder on the plunger wall upon rotation of the syringe body.